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HEALTH OFFICER

Cecil County
Health Department

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May 20, 1996

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ADMINISTRATION	996-5550
ALCOHOL & DRUG CENTER	996-5108
COMMUNITY HEALTH SERVICES	996-5100
ENVIRONMENTAL HEALTH SERVICES	996-5180
HEALTH PROMOTION	996-5168
MENTAL HEALTH CENTER	996-5104
T.O.D.	996-5100

Dear Resident:

The Public Health Assessment draft document on the Spectron Superfund hazardous waste Site (located in your community at 111 Providence Road) recommended the initiation of community health education and health professional education. To implement this recommendation, the Cecil County Health Department's Division of Health Promotion began conducting, in the fall of 1995, a Community Health Needs Assessment under a pilot project funded through a co-operative agreement between the federal Agency for Toxic Substances and Disease Registry (ATSDR) of the U.S. Public Health Service and the National Association of County and City Health Officials (NACCHO).

A Providence Valley Community Advisory Group was formed from local concerned citizens and members of the Health Department. The group assisted us with the development of the Health Education Needs Assessment. During late November or early December a health department staff member contacted you by home visit, telephone call, or through the mail to have you complete the survey. About 130 homes were surveyed out of the approximate 175 homes within the designated survey area. The boundaries of the area for our survey were the same boundaries as those in a former study of the area completed in 1977.

During January and February of 1996, the results of the survey were compiled, analyzed and presented to the Providence Valley Community Advisory Group. Based on the survey results and with the group's assistance, a health education plan was developed. The plan was submitted to NACCHO for approval at the end of February. In early March of 1996, the plan was approved and funding was granted to implement the educational plan. All grant activities are to be completed by September 1996.

In addition to the decision to have the Health Department improve communications with the Environmental Protection Agency (EPA) and the Maryland Department of the Environment (MDE) regarding clean-up actions at the site, it was decided that the Health Department would develop and mail 3 bimonthly newsletters to the residents in Providence Valley in order to respond to survey site-related questions and information topics. It was also decided that information would be made available to the medical community.

After you have received the 3 bimonthly newsletters, you will be given the opportunity to indicate if you now feel more informed about the Spectron Superfund Site.

Enclosed is Newsletter # 1 and the listed topics for future newsletters # 2 and # 3. We certainly hope this information will help you to understand more about the superfund site, located in your community.

For further information, you may contact The Division of Health Promotion at (410) 996-5168.

Sincerely,

Virginia R. Bailey, M.D., M.P.H.

Virginia R. Bailey, M.D., M.P.H.
Health Officer

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NEWSLETTER

Providence Valley area residents - May, 1996
Cecil County Health Department. 410-996-5168

SPECTRON / GALAXY SITE HISTORY

The Spectron hazardous waste site is located at 111 Providence Road in a trench-like valley, which surrounds the Little Elk Creek. The administration office and operating and storage facilities are located on a seven acre site on the banks of the creek, which flows from the northwest to the southeast. The groundwater below the site is located roughly ten feet below the ground surface (1).

For many years an industrial facility on the site was used to manufacture paper. It began operations in the late 1800s. In 1946 fire destroyed the facility and it sat vacant until 1961. At that time Galaxy Chemical began operating a facility to recycle waste solvents from electronic, pharmaceutical, paint, lacquer, coatings and chemical process industries. In 1975 the company filed for bankruptcy. In 1976 the company was sold and renamed Solvent Distillers, Inc. The name of the company was changed to Spectron, Inc. in 1978. Mr. Paul Mraz has been involved in the ownership of Galaxy/Spectron since the company first opened. The facility closed in 1988 and the company filed for bankruptcy.

From the time the facility opened in 1961 until 1970, waste sludge, process water, and discarded chemicals were placed in the on-site evaporation lagoon and sludge pits. In 1970, the sludge pits and evaporation lagoon were emptied and filled in. Plant wastes were then shipped to various other sites in Cecil County or disposed of in out of state landfills. Some of these wastes continued to be stored on-site in drums, which were sometimes found to be leaking during inspections of the facility.

In 1962 local residents began complaining of chemical odors from the site. Complaints increased greatly from 1967-1972. Several residents filed suit against the company, seeking damages for adverse health effects as a result of exposure to the plant odors. A vocal critic of the plant operations was

Dr. Pietro Capurro, a pathologist, who lived about one mile downstream of the plant. He claimed that he and other valley residents were suffering from illnesses related to exposure to plant emissions and suggested that a high rate of cancer existed among the residents of the Little Elk Valley. In 1974 the State of Maryland formed a task force to study the environmental health aspects of the valley. The task force reported a statistically significant elevation in the total cancer deaths in the valley population as compared to Cecil County as a whole (2). The task force cautioned, however, that the relative rarity of cancer deaths and small population size may have contributed to the finding of significance and that the monitoring of cancer deaths be continued in order to yield stronger conclusions. The task force also noted that the cancer death rates finding by itself reveals nothing about the cause.

Over a thirty year operating period of the site, there were many Notices of Violation, Consent Orders and Settlement Agreements, issued to or agreed to by the company and the Environmental Protection Agency (EPA) and the Maryland Department of the Environment (MDE). The most significant one was a Settlement Agreement between MDE, Spectron and the local citizen's organization, Families Linked Against Chemical Contamination (FLACC), in which Spectron agreed to shut down operations by September 1989.

In June 1989, the EPA began an Emergency Removal Action (a timely cleanup action initiated to mitigate an immediate public health hazard) under the Superfund Program. Eleven hundred drums of waste, 3,100 gallons of waste from storage tanks, 424,000 gallons of bulk liquid and 660 cubic yards of debris were removed, because of an imminent threat to human health and to the environment (1).

The Spectron site is contaminated by many different chemicals as a result of company operations and disposal. Contamination of the water which is stored underground in soil or in

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drinking water supplies as a by-product of the chlorination process used to disinfect water before distributing to homes for domestic use. One of the residents at one of these three locations indicated that he had added Clorox, a disinfectant, to his well in the past. Low levels of site-related VOCs were detected in one well downstream of the site, but the concentrations were at least 10 times below health risk levels. In order to be conservative, an offer of bottled drinking water was made to the residents until a granular activated carbon unit was installed to filter the water at this residence (3).

Residential water sampling was repeated in March 1996. The results are not available yet and will be reported in a future newsletter.

RESULTS OF RECENT AIR TESTING

Off-site air sampling results from tests conducted in August of 1995 indicate that no air borne chemicals are currently present at levels of public health concern. The sampling was conducted at five locations ringing the site. During some of the sampling days, odors were noticeable. Odors are most noticeable at the site and at substantial distances downwind of the site during summer months, when there is no wind and when the water is turbulent. The August 1995 sampling data indicate that average contaminants levels in the air do not pose a health risk.

SOIL CONTAMINATION

The complete surface of the site was paved in 1983 (2). Extensive well drilling and soil boring activities were performed during 1994-95. These activities confirmed that the soils beneath the site are heavily contaminated. The paving prevents these volatile contaminants from being slowly released at the ground surface. Because the contaminated soil is covered, there is no chance for human exposure to the soil through direct contact. Any volatilization of the contaminants upward through the soil and cap is expected to be minimal and should not pose a health concern at this time. (Volatilization refers to the process by which

chemicals pass from a liquid to a vapor.)

WHAT IS SUPERFUND?

Superfund is a program enacted by Congress in 1980 to locate, investigate, clean-up and or control the nation's worst abandoned or uncontrolled hazardous waste sites. Spectron is one of the over 1200 national Superfund Sites. The Superfund Program involves identifying potential sites, determining which sites qualify for the program, performing in-depth studies on qualifying sites and cleaning up sites to protect human health and the environment. The program is administered by the EPA in cooperation with state environmental agencies. The Superfund Trust Fund comes largely from taxes on petroleum and chemical industries. This fund is used when the responsible parties for contamination of the sites cannot be located, or cannot perform or pay for the clean-up work.

REPAIR OF THE PROVIDENCE BRIDGE

In March 1996 the bridge over the Little Elk Creek at the foot of Providence Road directly in front of Spectron has been closed for structural repairs. The closing of the bridge is not related to any clean-up action at the site. Officials of the Cecil County Road Department are consulting with the EPA and the PRPs to insure that the bridge repair is conducted in a safe manner due to the close proximity to the area of chemical seeps.

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PUBLIC HEALTH ASSESSMENT ENHANCEMENT TEAM FORMED

Spectron has been selected by Agency for Toxic Substances and Disease Registry (ATSDR) as a Public Health Assessment (PHA) Enhancement site. This is meant to improve the health assessment process by ensuring close teamwork among all the agencies involved, increasing the effectiveness of community outreach activities, and providing a more flexible and proactive health intervention. The Spectron PHA Enhancement Team includes representatives from the U.S. Environmental Protection Agency (EPA), the Maryland Department of the Environment (MDE), ATSDR, and the Cecil County Health Department.

Unlike most other PHA Enhancement Sites, the PHA has already been completed for Spectron and is expected to be released in final form by fall 1996. Consequently, the Enhancement Team activities will focus on communication with area residents and response to residents' concerns. The team will be meeting (usually via conference call) routinely to discuss issues at the site. The Cecil County Health Department's three newsletters will be utilized for most communication efforts with the residents. Fact sheets and other mailings from MDE and EPA will be used as needed.

CURRENT STATUS

On May 20, 1996 W. Michael McCabe, the Regional Administrator of EPA Region 3, signed an Administrative Order by Consent, requiring 137 companies, who also signed the order, to perform a Remedial Investigation (RI) and Feasibility Study (FS) at the site. The RI/FS process will be expedited at Spectron due to the amount of information already known about the site. The companies are required to submit a plan for the RI/FS in approximately 90 days.

Community residents are invited to attend the EPA public meeting is scheduled for Tuesday, June 18th at Cherry Hill Middle School at 7 P.M.

CECIL COUNTY HEALTH DEPARTMENT CONTACTS

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Future NEWSLETTERS will include these topics:

March 1996 creek and well sampling results
Information on site-related chemicals
Determining exposure
Site and meeting updates
Summary of the Public Health Assessment findings and recommendations
A contact list of environmental resource agencies to answer site-related questions

SPECTRON NEWSLETTER # 1 REFERENCES

1. Maryland Dept. of the Environment 12/12/94, Information on the Environmental Investigation at the Spectron Site.
2. Dept. of Health and Human Services, September 1995, Draft Public Health Assessment for Spectron/Galaxy Site, Elkton, Cecil County, Maryland, CERCLIS No. MD000218008.
3. Environmental Resources Management, Inc. (ERM), November 28, 1995, Residential Well and Creek Surface Water Sampling Results, Galaxy/Spectron Site, Reference: 94906.30.01, report submitted to the Environmental Protection Agency.



The Superfund Process

Site Discovery: EPA learns of site from reviewing records, reports, receipts and letters provided by states, hazardous substance handlers, or concerned citizens.

7/1/79

Site Inspection: Collection of air, soil, and water samples from site and nearby areas. Information collected about population, weather, and site owner.

3/3/81

Preliminary Assessment: Evaluation of existing site-specific data for early determination of need for further action.

10/30/87

Hazard Ranking System: Application of a mathematical approach to assessment of relative risks posed by site.

Emergency
Removals
1989, 1990
1991

National Priorities List: List those sites that are eligible for Superfund-financed remedial action.

5/31/94

Conduct Risk Assessment

Remedial Investigation: Assessment of the nature and extent of contamination and the associated health and environmental risks.

Community Interviews

Feasibility Study: Consideration of a range of cleanup options.

Proposed Plan: Explanation of cleanup method likely to be chosen and allows for public comment.

Public Comment

Risk Management

Record of Decision: The official report documenting the background information on the site and describes the chosen cleanup method.

Remedial Design/Remedial Action: Preparation of technical plans. Construction and other work to implement cleanup.

Five-Year Review: Ensures that site is maintained and remains safe.

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5/96 NEWSLETTER Re: Spectron Superfund Site

This first newsletter re:
Spectron Superfund site includes:

Site History

Results of:

Recent surface water testing
Recent ground water testing
Recent air testing

Soil contamination

What is the Superfund process?

Repair of the Providence Bridge

Public Health Assessment

Current Status

Cecil County Health Dept. Contacts

E P A

PUBLIC MEETING

TUESDAY, JUNE 18, 1996

7:00 P.M.

CHERRY HILL MIDDLE SCHOOL

Update on

Spectron

Superfund Site

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